What is claimed is:

1. A method for analyzing a sample contained in at least one sample well, comprising the steps of:

directing a plurality of different analyzing light wavelengths onto said sample contained in said sample well;

detecting a respective resultant light wavelength emanating from said sample for each of said analyzing light wavelengths directed onto said sample;

generating a result value representative of each respective resultant light wavelength; and

mathematically combining said result values to provide at least two growth indicator values, each representing a respective growth characteristic of said sample.

2. A method as claimed in claim 1, wherein:

one of said growth indicator values represents a redox state of said sample.

3. A method as claimed in claim 1, wherein:

one of said growth indicator values represents a turbidity value of said sample.

4. A method as claimed in claim 1, wherein:

said directing step directs at least three of said analyzing light wavelengths onto said sample.

5. A method as claimed in claim 4, wherein:

said three analyzing light wavelengths include red, green and blue light wavelengths.

6. A method as claimed in claim 1, wherein:

said sample is contained in a plurality of said sample wells; and

said directing, detecting and combining steps are performed for each of said sample wells.

7. A method as claimed in claim 1, wherein:

said directing, detecting and combining steps are each performed on said sample in said sample well at a plurality of time intervals, such that each of said combining steps provides a set of said growth indicator values for each of said time intervals.

8. A method as claimed in claim 1, wherein:

said sample is contained in a plurality of said sample wells; and

said directing, detecting and combining steps are performed on said sample in each of said sample wells at each of a plurality of time intervals, such that each of said combining steps provides a respective set of said growth indicator values for each of said respective sample wells at each of said intervals.

9. A method as claimed in claim 8, further comprising the step of:

mathematically combining certain of said values in said respective sets of growth indicator values for each of said sample wells to provide a respective sample well characteristic value for each of said respective sample wells.

10. A method as claimed in claim 9, further comprising the step of:

grouping said sample well characteristic values into a plurality of groups; and

comparing said sample well characteristic values to each other in each of said respective groups to determine in which sample wells in each of said groups sample growth is inhibited.

11. A computer-readable medium of instructions for controlling a sample analyzing system to analyze a sample contained in at least one sample well, comprising:

a first set of instructions, adapted to control said system to direct a plurality of different analyzing light wavelengths onto said sample contained in said sample well;

a second set of instructions, adapted to control said system to detect a respective resultant light wavelength emanating from said sample for each of said analyzing light wavelengths directed onto said sample, and to provide a result value representative of each respective resultant light wavelength; and

a third set of instructions, adapted to control said system to mathematically combine said result values to provide at least two growth indicator values, each representing a respective growth characteristics of said sample.

12. A computer-readable medium of instructions as claimed in claim 11, wherein:

one of said growth indicator values represents a redox state of said sample.

13. A computer-readable medium of instructions as claimed in claim 11, wherein:

one of said growth indicator values represents a turbidity value of said sample.

14. A computer-readable medium of instructions as claimed in claim 11, wherein:

said first set of instructions controls said system to direct at least three of said analyzing light wavelengths onto said sample.

15. A computer-readable medium of instructions as claimed in claim 14, wherein:

said three analyzing light wavelengths include red, green and blue light wavelengths.

16. A computer-readable medium of instructions as claimed in claim 11, wherein:

said sample is contained in a plurality of said sample wells; and

said first, second and third sets of instructions are adapted to control said system to perform said directing, detecting and combining operations for each of said sample wells.

17. A computer-readable medium of instructions as claimed in claim 11, wherein:

said first, second and third set of instructions are adapted to control said system to perform said directing, detecting and combining operations on said sample in said sample well at a plurality of time intervals, such that each of said combining operations provides a set of said growth indicator values for each of said intervals.

18. A computer-readable medium of instructions as claimed in claim 11, wherein:

said sample is contained in a plurality of said sample wells; and

said first, second and third set of instructions are adapted to control said system to perform said directing, detecting and combining operations on said sample in each of said sample wells at each of a plurality of time intervals, such that each of said combining operations provides a respective set of said growth indicator values for each of said respective sample wells at each of said intervals.

19. A computer-readable medium of instructions as claimed in claim 18, further comprising:

a fourth set of instructions, adapted to control said system to mathematically combine certain of said values in said respective sets of growth indicator values for each of said sample wells to provide a respective sample well characteristic value for each of said respective sample wells.

20. A computer-readable medium of instructions as claimed in claim 19, further comprising:

a fifth set of instructions, adapted to control said system to group said sample well characteristic values into a plurality of groups; and

a sixth set of instructions, adapted to control said system to compare said sample well characteristic values to each other in each of said respective groups to determine in which sample wells in each of said groups sample growth is inhibited.

21. A method for determining at least one minimum inhibitory concentration (MIC) value for a sample contained in a sample container, said sample container including a plurality of sample wells, each containing a portion of said sample and a respective material adapted to affect growth of said sample, said method comprising the steps of:

taking a respective set of readings of each respective sample well at each of a plurality of intervals of time to provide a respective set of values for each respective sample well at each of said intervals;

for each of said sample wells, mathematically combining said respective sets of values to provide a respective well characteristic value for each of said sample wells;

grouping said sample well characteristic values into a plurality of groups representative of respective groups of said sample wells; and

comparing said sample well characteristic values to each other in each of said respective groups to determine a respective MIC value for each of said groups of sample wells.

22. A method as claimed in claim 21, wherein:

said readings taking step detects a plurality of light wavelengths from each of said sample wells at each of said intervals to provide said respective sets of values for each respective sample well at each of said intervals.

23. A method as claimed in claim 22, wherein:

said plurality of light wavelengths includes red, blue and green light wavelengths.

24. A method as claimed in claim 22, wherein:

in each of said respective sets of values, one of said values represents a redox state of its respective sample well and the other of said values represents a turbidity value of its respective sample well.

25. A computer-readable medium of instructions for controlling a sample analyzing system to determine at least one minimum inhibitory concentration (MIC) value for a sample contained in a sample container, said sample container including a plurality of sample wells, each containing a portion of said sample and a respective material adapted to affect growth of said sample, said computer-readable medium of instructions comprising:

a first set of instructions, adapted to control said system to take a respective set of readings of each respective sample well at each of a plurality of intervals of time to provide a respective set of values for each respective sample well at each of said intervals;

a second set of instructions, adapted to control said system to, for each of said sample wells, mathematically combine said respective sets of values to provide a respective well characteristic value for each of said sample wells;

a third set of instructions, adapted to control said system to group said sample well characteristic values into a plurality of groups representative of respective groups of said sample wells; and

a fourth set of instructions, adapted to control said system to compare said sample well characteristic values to each other in each of said respective groups to determine a respective MIC value for each of said groups of sample wells.

26. A computer-readable medium of instructions as claimed in claim 25, wherein:

said first set of instructions controls said system to detect a plurality of different light wavelengths from each of said sample wells at each of said intervals to provide said respective sets of values for each respective sample well at each of said intervals.

27. A computer readable medium of instructions as claimed in claim 26, wherein:

said plurality of light wavelengths includes red, blue and green light wavelengths.

28. A computer readable medium of instructions as claimed in claim 26, wherein:

in each of said respective sets of values, one of said values represents a redox state of its respective sample well and the other of said values represents a turbidity value of its respective sample well.